

WHAT IS CLAIMED IS:

1. A method of processing data traffic in transit in a mobile telecommunication network, comprising:

5 filtering a packet of data for an application associated therewith; and
applying a service marking to the packet dependent on the application associated with the packet.

2. The method according to claim 1, wherein filtering a packet of data for an application associated therewith further comprises reading a port from the packet and determining the application from the read port.

3. The method according to claim 2, wherein determining the application from the read port further comprises:

15 interrogating a table with the read port, the table including an index of at least one port, each of the at least one port comprises a key of the table, a record having a service marking respectively associated with each key;

determining the read port has a match with a first key of the table; and
returning a first service marking included in a record associated with the first key.

4. The method according to claim 3, further comprising writing the first service marking into a field of the packet.

5. The method according to claim 3, wherein the service marking in the record is a differentiated service codepoint.

6. A node of a mobile telecommunication network operable to deliver at least one packet to a mobile device serviced by the mobile telecommunication network, comprising:

- 5 an interface to at least one other network node; and
a table comprising an index including at least one key, each key having a record associated therewith, each record having a service marking therein, the node operable to interrogate the table with an identification of an application obtained from the packet, the service marking returned to the node upon a match between the identification and a key.

10 7. The node according to claim 6, wherein the node is an access router that interfaces the mobile telecommunication network with an external network.

15 8. The node according to claim 6, wherein the node writes the returned service marking into a field of the packet.

9. The node according to claim 8, wherein the field is a differentiated services field of a transport layer header encapsulated in the packet.

20 10. The node according to claim 6, wherein the service marking is a differentiated services codepoint.

11. The node according to claim 6, wherein the node is a general packet radio services support node.

12. A mobile telecommunication network operable to provide data services to a mobile terminal serviced thereby, the mobile telecommunications network comprising:

a first service node including a table comprising one or more keys and at least one record associated with each of the one or more keys having a value indicative of an application, each of the one or more records having a service marking stored therein;

a base station subsystem operable to transmit data to the first service node and receive data from the first service node; and

at least one base transceiver station operable to provide radio frequency links to the mobile device, the first service node operable to receive a first packet and determine an application associated therewith, the first service node operable to interrogate the table with a query value indicative of the application, a service marking being returned upon matching the query value with a first key value, the service marking maintained in a record associated with the first key value, the node operable to write the service marking into a field of the packet, the node operable to transmit the packet across the telecommunication network.

13. The telecommunication network according to claim 12, wherein each value of the one or more keys is a port number.

14. The telecommunication network according to claim 12, wherein each service marking is a differentiated services codepoint.

15. The telecommunication network according to claim 12, wherein the service node further comprises a memory bank, a central processing unit, and a filter, a port number field of the packet read by the filter, the value of the port number read used by the node to interrogate the table index.

16. The telecommunication network according to claim 12, wherein the service node further comprises a processing card, the processing card including a memory module and a processing unit, a filter maintained in the memory module and executable
- 5 by the processing unit, the filter operable to analyze the packet and determine the value indicative of the application.

$\begin{pmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \\ x_5 \\ x_6 \\ x_7 \\ x_8 \\ x_9 \\ x_{10} \\ x_{11} \\ x_{12} \\ x_{13} \\ x_{14} \\ x_{15} \\ x_{16} \\ x_{17} \\ x_{18} \\ x_{19} \\ x_{20} \\ x_{21} \\ x_{22} \\ x_{23} \\ x_{24} \\ x_{25} \\ x_{26} \\ x_{27} \\ x_{28} \\ x_{29} \\ x_{30} \\ x_{31} \\ x_{32} \\ x_{33} \\ x_{34} \\ x_{35} \\ x_{36} \\ x_{37} \\ x_{38} \\ x_{39} \\ x_{40} \\ x_{41} \\ x_{42} \\ x_{43} \\ x_{44} \\ x_{45} \\ x_{46} \\ x_{47} \\ x_{48} \\ x_{49} \\ x_{50} \\ x_{51} \\ x_{52} \\ x_{53} \\ x_{54} \\ x_{55} \\ x_{56} \\ x_{57} \\ x_{58} \\ x_{59} \\ x_{60} \\ x_{61} \\ x_{62} \\ x_{63} \\ x_{64} \\ x_{65} \\ x_{66} \\ x_{67} \\ x_{68} \\ x_{69} \\ x_{70} \\ x_{71} \\ x_{72} \\ x_{73} \\ x_{74} \\ x_{75} \\ x_{76} \\ x_{77} \\ x_{78} \\ x_{79} \\ x_{80} \\ x_{81} \\ x_{82} \\ x_{83} \\ x_{84} \\ x_{85} \\ x_{86} \\ x_{87} \\ x_{88} \\ x_{89} \\ x_{90} \\ x_{91} \\ x_{92} \\ x_{93} \\ x_{94} \\ x_{95} \\ x_{96} \\ x_{97} \\ x_{98} \\ x_{99} \\ x_{100} \end{pmatrix}$